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Smetana et al.

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(54) **ELECTRIC AXLE WITH A TWO GEAR TRANSMISSION**

(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

An axle drive system for a motor vehicle, having a dynamoelectric drive motor (1), a shiftable superimposing transmission having a first and a second gear stage (3, 4), a shift actuator system (5) for shifting the superimposing transmission, as well as a power divider (8) driving two output shafts (10, 12). The drive motor (1), power divider shafts (9, 11), output shafts (10, 12) and dynamoelectric drive motor (1) are arranged coaxially to each other and perpendicular to the direction of travel of the motor vehicle. A particularly compact design is achieved for the axle drive system of the aforementioned type in that the shift actuator system (5) having an electric motor (14) provided for actuation purposes is in its entirety disposed in a space bounded by the first gear stage (3) on one side and the second gear stage (4) on the other side in the axial direction of the drive system.

11 Claims, 3 Drawing Sheets

